can be used to cleave human autoantigens to generate fragments that are autoantigenic in humans.

Therefore, Applicant has amended the claims generally to recite that the autoantigen(s) are "human autoantigen(s)" and the antigenic fragments are "human autoantigenic fragment(s)." These amendments are supported throughout the specification.

Applicant has also added Claim 30 to recite the method of Claim 23 wherein an inhibitor of caspases is used. The claim is supported throughout the specification and particularly at, for example, page 21, line 31-page 22, line 2 and page 47, lines 5-11.

Rejection under 35 U.S.C. § 112, 2nd paragraph

Claims 24, 25, 26 and 27 were rejected as indefinite because Claims 24, 25 and 27 depended on non-elected Claim 22.

Applicant notes that the recited dependencies of the Claims as filed appears to have been the result of a typographical or clerical error. The claims clearly refer to the method of Claim 23, not the assay of Claim 22. Applicant has corrected the dependency of these claims and requests withdrawal of the stated rejection.

Rejection under 35 U.S.C. § 102(b)

The Examiner rejected Claims 23-27 as anticipated by Froelich et al, citation 23 on the IDS submitted 2-14-00. Applicant respectfully traverses.

The Examiner contends that Froelich et al, J. Biol. Chem 271:29073, teaches a method of making fragments from PARP using Granzyme B wherein both PARP and Granzyme B are purified prior to PARP fragment generation. The Examiner cited particularly to FIG. 1 of the reference.

Applicant does not agree with the Examiner's position. Applicant does see that Granzyme B was purified to homogeneity (p 29073, col. 2, Reagents) but does not see any teaching of purifying PARP or contacting Granzyme B with purified PARP. Applicant only sees the reference to teach that some fragments can be generated from PARP if Granzyme B is taken up into cells and that the fragments can be detected in cell lysates. (p.29074, col. 1). Moreover, the reference teaches that Granzyme B is postulated to activate Ced-3-like proteases which in turn cleave PARP to generate said fragments (p 29076, col. 1, last paragraph and elsewhere).

Therefore, Applicant believes that the stated rejection does not state a proper case of anticipation of the claims and requests that the rejection be withdrawn.

Telephone Conference

Applicant invites the Examiner to contact Applicant's undersigned attorney to discuss the claims if such discussion could further the prosecution of this application.

CONDITIONAL PETITION

Applicant hereby makes a Conditional Petition for any relief available to correct any defect in connection with this filing, or any defect remaining in this application after this filing. The Commissioner is authorized to charge deposit account 13-2755 for the petition fee and any other fee(s) required to effect this Conditional Petition.

CONCLUSION

In view of the foregoing remarks, it is believed that the grounds of the rejections have been addressed and the claims are in condition for allowance.

Respectfully submitted,

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VERSION OF AMENDED CLAIMS WITH MARKINGS TO SHOW CHANGES MADE

23. (AMENDED) A method of making an human autoantigenic fragment from an human autoantigen comprising the steps of

(a) isolating cells containing at least one human autoantigen, and

(b) contacting the cells with a lymphocyte granule enzyme to produce a mixture containing at least one human autoantigenic fragment.

24. (AMENDED) The method of claim [22] 23 further comprising the step of

(c) isolating said at least one human autoantigenic fragment.

25. (AMENDED) The method of claim [22] 23 wherein step (a) further comprises purifying at least one human autoantigen from the cells and step (b) comprises contacting said purified human autoantigen[s] with granzyme B.

26. (AMENDED) The method of claim 25 wherein in step (a) the at least one autoantigen is at least one of human DNA-PK_{cs}, human PARP and human NuMA, and step (b) comprises contacting said at least one human autoantigen with granzyme B.

27. (AMENDED) The method of claim [22] 23 wherein said lymphocyte granule enzyme is isolated from the granules of at least one lymphocyte selected from the group consisting of cytotoxic T lymphocytes (CTL), natural killer cells (NK), lymphokine activated killer cells (LAK) and cells of the YT cell line.

Please add the following new claim.

30. The method of claim 23 wherein step (b) further comprises contacting the cells with a caspase inhibitor.